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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,498	02/23/2005	Michael Meyer	P16671-US1	7515
27045	7590	10/30/2006	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			DILDINE JR, R STEPHEN	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/525,498

Applicant(s)

MEYER ET AL.

Examiner

R. Stephen Dildine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 23 February 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

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The information disclosure statement filed 23 February 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the IBM Technical Disclosure Bulletin (Cite Number AC) referred to therein has not been considered (as indicated on the PTO-1449) because a copy was not provided.

Specification

The disclosure is objected to because of the following informalities: The references to the claims appearing at the bottom of page 3 and the top of page 4 are objected to as improper since the specification by itself is to be a description of the invention and how to carry out the invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite performing a further data transmission (*i.e.* transmitting further new data) according to results of data comparisons; however, the specification (see page 16, lines 4-5 for example) describes performing a retransmission of the same data according to results of data comparisons.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites the limitation "the comparison of data which is detected as erroneous" in the last two lines of the claim. There is insufficient antecedent basis for this limitation in the claim. Claim 19 recites the limitation "the reliability thresholds" in lines 2-4 for which there is insufficient antecedent basis for plural thresholds. Claim 22 recites the limitation "the next higher protocol layer" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim. Claim 23 recites the limitation "the received data" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 13-21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The last two lines of claim 13 recite "the comparison of data which is detected as erroneous" but it is never recited in the claim what "the data which is detected as erroneous" is compared with, therefore claims 13-21 are incomplete.

Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites the limitation "one further condition". There is insufficient antecedent basis for this limitation in the claim since there is no recitation of any "conditions" in the parent claim.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

As can best be understood, claims 13 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Aikawa *et al.* (2004/0025099) who discloses determining a reliability measure for received data (“In one aspect of the present invention, a historical range of values (or a single value) is built that records the average number of times a device NAKs before successfully transferring (or receiving) data” paragraph [0070]), aggregating the reliability measure for at least a part of the service data unit (“In one aspect of the present invention, a historical range of values (or a single value) is built” paragraph [0070]), performing a comparison of the aggregated reliability measure to a reliability threshold (“Based on the historical information, threshold value(s) are associated with the device t” paragraph [0070]), performing the further data transmission according to the result of the comparison for data which is detected as erroneous (“The threshold determines the polling time interval when the host will poll the device for data after receiving a NAK from the particular device” paragraph [0070]), wherein the receiver sends reliability information indicating an error level of the received data to the transmitter (“records the average number of times a device NAKs” paragraph [0070])

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As can best be understood, claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Itoh (2005/0226182) who discloses determining a reliability measure for received data ("unit 111 of a base station carries out calculation to obtain a received signal quality difference information" abstract), aggregating the reliability measure for at least a part of the service data unit ("indicative of a difference between a received signal quality at the current stage and that of a past stage at a terminal" abstract), performing a comparison of the aggregated reliability measure to a reliability threshold ("calculation to obtain a received signal quality difference information" abstract), performing the further data transmission according to the result of the comparison for data which is detected as erroneous ("and supplies to a control unit 112. The control unit 112 controls a power setting unit 113 based on the received signal quality difference information supplied from the mode determining unit 111" abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

As can best be understood, claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malladi *et al.* (2003/0210668) further in view of Schmidt *et al.* (7,107,498). Malladi *et al.* discloses determining a reliability measure for received data performing a comparison of the reliability measure to a reliability threshold (see the abstract, "The serving base station then determines, based on the uplink received SNR and an SNR threshold"), performing the further data transmission according to the result of the comparison for data which is detected as erroneous ("if it is determined that link imbalance potentially exists, then a 3-way handshake is performed to check the reliability of a feedback mechanism used for packet data transmission. Appropriate responsive actions may then be performed based on the result of the check", abstract). Mantha *et al.* fails to disclose aggregating the reliability measure for at least a part of the service data unit, however Schmidt *et al.* teaches (see the abstract) "The data also includes an indication as to the reliability of the link from the first node to the second node based on a measure of at least one previous message, for example, the BER or aggregate BER" (emphasis added) which one skilled in the art would use instead of a single reliability measure in view of the statement of Schmidt *et*

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al. at column 5, lines 44-48 "For example, the controller 112 of node A can start calculating the value representing the aggregate BER upon receiving the first message from node B, but it can take around 10 or more messages to determine a reasonable indication of the link quality".

As can best be understood, claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mantha *et al.* (2003/0126551) further in view of Schmidt *et al.* (7,107,498). Mantha *et al.* teaches (see Figs. 11(a) and 11(b)) determining a reliability measure (i) for received data, performing a comparison of the reliability measure to a reliability threshold (m), performing the further data transmission according to the result of the comparison for data which is detected as erroneous (S118). Mantha *et al.* fails to disclose aggregating the reliability measure for at least a part of the service data unit, however Schmidt *et al.* teaches (see the abstract) "The data also includes an indication as to the reliability of the link from the first node to the second node based on a measure of at least one previous message, for example, the BER or aggregate BER" (emphasis added) which one skilled in the art would use instead of a single reliability measure in view of the statement of Schmidt *et al.* at column 5, lines 44-48 "For example, the controller 112 of node A can start calculating the value representing the aggregate BER upon receiving the first message from node B, but it can take around 10 or more messages to determine a reasonable indication of the link quality".

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kwan *et al.* shows the modulation and error correction-coding format being changed to match the current received signal quality or channel conditions.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Stephen Dildine whose telephone number is (571) 272-3820. The examiner can normally be reached on M - F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2133

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